# Jesus Mancilla

# Senior Quantitative UX Researcher

Survey Analytics, Behavioral Logs, Experimentation, KPI Development, Mixed Methods, AI-supported Analysis 🛘 +1 650 391 4301 | jesus@jgmancilla.com | 🗖 LinkedIn.com/in/jegama | 🗘 GitHub.com/jegama | 🚱 jgmancilla.com

# Professional Summary

Senior Quantitative UX Researcher with a strong applied ML toolkit to scale insights: modular survey analysis systems, hybrid classifiers for open-ended responses, and AI-indexed research repositories. Proven impact at Meta, Roku, Walmart—compressing analysis cycles (~30 hrs to <8 hrs), enabling org-wide self-serve insights, and tying behavioral telemetry to KPIs to drive product decisions.

## Research Toolkit & Domains

Quant Methods: Survey design/analysis, sampling, regressions, ANOVA, T-tests, dashboards Behavioral Data: Telemetry pipelines, event schema, large-scale log analysis, KPI definition Mixed Methods: Triangulation with qual, diary/longitudinal studies, insight synthesis ML/AI Assist: Open-ended classification, clustering, retrieval, LLM-augmented analysis Tools: Python, R. SQL, Tableau, Jupyter, LangChain, FastAPI; Next. is for insight portals Collaboration: Stakeholder alignment, roadmapping, experiment design, exec reporting

## Work Experience

Argomai

Houston, TX (Remote)

Jan 2025 – Present

- Co-founder & AI Solutions Lead
  - Led research-informed AI solution design: discovery, stakeholder alignment, and measurement frameworks for customer-facing tools.
  - Operationalized insights via retrieval pipelines and reusable components to scale analysis and knowledge access across

Meta

Houston, TX (Remote) Jan 2024 – Jan 2025

Senior Quantitative UX Researcher

- Built a hybrid classifier for open-ended survey responses (clustering, few-shot, human-in-the-loop, multi-agent reasoning) to triage at scale.
- Reduced analysis time from ~30 hrs to <8 hrs; shipped Python analytics toolkit (regressions, ANOVA, T-tests) reused across teams.
- Merged editor behavioral logs with in-app surveys to deliver comprehensive, action-oriented insights that shaped roadmap priorities.
- Ran longitudinal research and bi-weekly tracking for a new ML product with 500M+ MAU, defining success metrics and monitoring performance.

Roku

San Jose, CA

Senior User Experience Researcher

Jan 2021 – Nov 2023

- Developed the Modular Survey Analysis System: end-to-end ML-assisted report generation (stats + NLP categorization) for survey data.
- Built an AI-indexed research database; cut weekly report generation from ~4 hrs to <5 min with automation and LLM summaries.
- Led quant/qual device research; conducted **behavioral log analysis across 70M+ devices** to inform product decisions and KPI targets.

Walmart Global Tech

Sunnyvale, CA

Senior User Experience Researcher

Aug 2019 - Nov 2020

- Established KPIs and analytics for Sam's Club mobile app; integrated interaction data with business metrics to guide UX strategy.

Scrapworks Inc.

Palo Alto, CA

Data Scientist Sep 2017 - Aug 2019 - Reduced forecasting error by 60% using deep learning; delivered dashboards over 20 years of sales data (+30% sales

Initiated NLP classification and productionized data ingestion; informed product and operations decisions.

Suggestic User Experience Researcher Mexico City, Mexico

Dec 2016 - Sep 2017

- Executed data-driven testing and analysis; designed advanced prototypes to validate feature concepts.

Stanford University User Experience Researcher Stanford, CA

May 2016 - Nov 2016

- Conducted research on driver stress using multimodal data; contributed to algorithms with 90% accuracy.
- Co-authored publications on automotive UI and pedestrian interactions.

Mexico City, Mexico

Aug 2014 - May 2016

**ITAM** 

User Experience Researcher

- Analyzed psychophysiological signals; created custom visualizations to translate findings into design guidance.

# SELECTED RESEARCH/SYSTEMS PROJECTS

Research Librarian (AI Index) — Improved findability and reuse of insights via embeddings, vector search, and custom ranking.

Modular Survey Analysis System — ML-assisted pipeline to auto-generate survey reports with stats and NLP categorization.

Customer Support Insights — RAG and evaluation framework to summarize support knowledge and instrument outcomes for leadership.

### EDUCATION

## Instituto Tecnológico Autónomo de México (ITAM)

M.S. in Computer Science (HCI/AI Focus)

2014 - 2016

#### Universidad de Colima

B.A. in Psychology

2009 - 2013

# SELECTED PUBLICATIONS

Ramos-Rivera, R. E., Santana Mancilla, P. C., Garcia-Mancilla, J., & Gaytán-Lugo, L. S. (2025). Language models in education: Generative AI to optimize teacher performance analysis. InnovAcademica, 1(2), 74–85.

Ramos-Rivera, R. E., Garcia-Mancilla, J., Cárdenas-Villa, G. E., & Santana-Mancilla, P. C. (2024). Towards Improving Teacher Performance Assessment through Human-Centered AI-Powered Survey Analysis: An Approach Using Large Language Models (LLM). Avances en Interacción Humano-Computadora, 9(1), 261-264.

Baltodano, Sonia, Jesus Garcia-Mancilla, and Wendy Ju. "Eliciting Driver Stress Using Naturalistic Driving Scenarios on Real Roads." In Proceedings of the 10th International Conference on Automotive User Interfaces and Interactive Vehicular Applications, pp. 298-309. ACM, 2018.

Currano, Rebecca, So Yeon Park, Lawrence Domingo, Jesus Garcia-Mancilla, Pedro C. Santana-Mancilla, Victor M. Gonzalez, and Wendy Ju. "¡Vamos!: Observations of Pedestrian Interactions with Driverless Cars in Mexico." In Proceedings of the 10th International Conference on Automotive User Interfaces and Interactive Vehicular Applications, pp. 210-220. ACM, 2018.

J. Garcia-Mancilla, J. E. Ramirez-Marquez, C. Lipizzi, G. T. Vesonder, and V. M. Gonzalez, "Characterizing negative sentiments in at-risk populations via crowd computing: a computational social science approach," International Journal of Data Science and Analytics, Jun. 2018.

For full list, see: jgmancilla.com/research-papers